

WEST Search History

DATE: Wednesday, March 17, 2004

Hide? **Set Name** **Query****Hit Count***DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ*

<input type="checkbox"/>	L2	L1 with (mammalian or human or rat or mouse or murine)	7
<input type="checkbox"/>	L1	serine adj2 racemase	35

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Search Results - Record(s) 1 through 7 of 7 returned.

☐ 1. Document ID: US 20040018206 A1

Using default format because multiple data bases are involved.

L2: Entry 1 of 7

File: PGPB

Jan 29, 2004

PGPUB-DOCUMENT-NUMBER: 20040018206
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20040018206 A1

TITLE: Cloning, sequencing and expression of a gene encoding an eukaryotic amino acid racemase, and diagnostic, therapeutic, and vaccination applications of parasite and viral mitogens

PUBLICATION-DATE: January 29, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Minoprio, Paola	Villiers S/Marne		FR	
Arala-Chaves, Mario	Ovar		PT	
Arala-Chaves, Mario	Lisboa		PT	
Coutinho, Antonio	Paris		FR	
San Martin, Bernardo Reina	Gentilly		MX	
Rougeot, Catherine	Chevreuse		FR	
Degrave, Wim	Bagneu		FR	
Cosson, Alain	Neuilly S/Marne		FR	

US-CL-CURRENT: [424/186.1](#); [435/320.1](#), [435/325](#), [435/456](#), [435/69.3](#), [530/350](#), [536/23.72](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	WMC	Draw De
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☐ 2. Document ID: US 20030212262 A1

L2: Entry 2 of 7

File: PGPB

Nov 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030212262
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030212262 A1

TITLE: Human serine racemase

h e b b g e e e f e f e e f b e

PUBLICATION-DATE: November 13, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Connolly, Thomas M	Lansdale	PA	US	
Liu, Yuan	Lansdale	PA	US	
Xia, Menghang	Blue Bell	PA	US	

US-CL-CURRENT: 536/23.2; 435/106, 435/233, 435/320.1, 435/325, 435/6, 435/69.1, 800/8

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw De
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3. Document ID: US 20030175941 A1

L2: Entry 3 of 7

File: PGPB

Sep 18, 2003

PGPUB-DOCUMENT-NUMBER: 20030175941

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030175941 A1

TITLE: Regulation of human serine racemase enzyme

PUBLICATION-DATE: September 18, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Ramakrishnan, Shyam	Brighton	MA	US	

US-CL-CURRENT: 435/233; 435/320.1, 435/325, 435/6, 435/69.1, 435/7.1, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw De
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4. Document ID: US 20030064439 A1

L2: Entry 4 of 7

File: PGPB

Apr 3, 2003

PGPUB-DOCUMENT-NUMBER: 20030064439

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030064439 A1

TITLE: Novel nucleic acid sequences encoding melanoma associated antigen molecules, aminotransferase molecules, ATPase molecules, acyltransferase molecules, pyridoxal-phosphate dependant enzyme molecules and uses therefor

PUBLICATION-DATE: April 3, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Bandaru, Rajasekhar	Watertown	MA	US	

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Glucksmann, Maria Alexandra	Lexington	MA	US
Meyers, Rachel E.	Newton	MA	US
Rudolph-Owen, Laura A.	Jamaica Plain	MA	US

US-CL-CURRENT: 435/69.1; 435/193, 435/320.1, 435/325, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 5. Document ID: US 20020115137 A1

L2: Entry 5 of 7

File: PGPB

Aug 22, 2002

PGPUB-DOCUMENT-NUMBER: 20020115137
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020115137 A1

TITLE: 22406, a novel human pyridoxal-phosphate dependent enzyme family member and uses therefor

PUBLICATION-DATE: August 22, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Meyers, Rachel A.	Newton	MA	US	
Rudolph-Owen, Laura A.	Jamaica Plain	MA	US	

US-CL-CURRENT: 435/69.1; 435/320.1, 435/325, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 6. Document ID: US 6458576 B1

L2: Entry 6 of 7

File: USPT

Oct 1, 2002

US-PAT-NO: 6458576
DOCUMENT-IDENTIFIER: US 6458576 B1

TITLE: 22406, a novel human pyridoxal-phosphate dependent enzyme family member and uses therefor

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw D
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☐ 7. Document ID: MX 2001007310 A1, WO 200043526 A1, AU 200024135 A, NO 200103557 A, EP 1147203 A1, BR 200007592 A, KR 2001103740 A, HU 200105035 A2, JP 2002534984 W

L2: Entry 7 of 7

File: DWPI

May 1, 2002

DERWENT-ACC-NO: 2000-482915

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DERWENT-WEEK: 200368

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TITLE: Mammalian serine racemase preparations, used to identify modulators which can be used to treat diseases associated with N-methyl-D-aspartate receptor overactivation, e.g. Alzheimer's disease

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	KMOC	Drawn De
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Terms	Documents
L1 with (mammalian or huiman or rat or mouse or murine)	7

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International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : C12N 15/61, 9/90, 15/85, 5/10, C12Q 1/533		A1	(11) International Publication Number: WO 00/43526 (43) International Publication Date: 27 July 2000 (27.07.00)
(21) International Application Number: PCT/US00/00938 (22) International Filing Date: 18 January 2000 (18.01.00) (30) Priority Data: 60/116,333 19 January 1999 (19.01.99) US 60/144,839 21 July 1999 (21.07.99) US 60/145,953 28 July 1999 (28.07.99) US (63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Applications US 60/145,953 (CON) Filed on 28 July 1999 (28.07.99) US 60/144,839 (CON) Filed on 21 July 1999 (21.07.99) US 60/116,333 (CON) Filed on 19 January 1999 (19.01.99) (71) Applicant (for all designated States except US): THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE [US/US]; Suite 906, 111 Market Place, Baltimore, MD 21202 (US).		(72) Inventors; and (75) Inventors/Applicants (for US only): SNYDER, Solomon, H. [US/US]; The Johns Hopkins University, Suite 906, 111 Market Place, Baltimore, MD 21202 (US). WOLOSKER, Herman [US/US]; The Johns Hopkins University, Suite 906, 111 Market Place, Baltimore, MD 21202 (US). SHETH, Kevin [US/US]; The Johns Hopkins University, Suite 906, 111 Market Place, Baltimore, MD 21202 (US). MASAAKI, Takahashi [US/US]; The Johns Hopkins University, Suite 906, 111 Market Place, Baltimore, MD 21202 (US). MO-THET, Jean-Pierre [US/US]; The Johns Hopkins University, Suite 906, 111 Market Place, Baltimore, MD 21202 (US). BRADY, Roscoe, O., Jr. [US/US]; The Johns Hopkins University, Suite 906, 111 Market Place, Baltimore, MD 21202 (US). FERRIS, Christopher, D. [US/US]; The Johns Hopkins University, Suite 906, 111 Market Place, Baltimore, MD 21202 (US). (74) Agents: KAGAN, Sarah, A. et al.; Banner & Witcoff, Ltd., 11th floor, 1001 G Street, N.W., Washington, DC 20001-4597 (US). (81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>	
(54) Title: MAMMALIAN SERINE RACEMASE			
(57) Abstract <p>High levels of D-serine occur in mammalian brain, where it appears to be an endogenous ligand of the "glycine site" of NMDA receptors. We have purified from rat brain a soluble enzyme that catalyzes the direct racemization of L-serine to D-serine. Purified serine racemase has a molecular weight of 37 kDa and requires pyridoxal 5'-phosphate for its activity. The enzyme is highly selective toward L-serine, failing to racemize any other amino acid tested. We have also identified polynucleotide sequences which encode mammalian, including human, serine racemase. Compounds which modulate the activity of mammalian serine racemase are useful for treating conditions and diseases which involve overstimulation of NMDA receptors, such as stroke and various neurodegenerative diseases.</p>			

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 00/00938

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N15/61 C12N9/90 C12N15/85 C12N5/10 C12Q1/533

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C12N C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	TAKUMA UO ET AL.: "Occurrence of pyridoxal 5'-phosphate-dependent Serine racemase in silkworm, Bombyx mori" BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, vol. 246, no. 1, 8 May 1998 (1998-05-08), pages 31-34, XP002135965 ORLANDO, FL US abstract page 32, right-hand column, paragraph 2 -page 33, left-hand column, paragraph 3 page 34, left-hand column, last paragraph ---	1-13
X	GB 2 048 266 A (MITSUITOATSU CHEMICALS) 10 December 1980 (1980-12-10) page 2, line 16 - line 50 ---	1-6, 9-11, 24, 28, 32-38
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

9 May 2000

Date of mailing of the international search report

23/05/2000

Name and mailing address of the ISA

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Authorized officer

Montero Lopez, B

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 00/00938

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DAVID S. DUNLOP ET AL.: "The origin and turnover of D-Serine in brain" BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, vol. 235, no. 1, 9 June 1997 (1997-06-09), pages 26-30, XP002135966 ORLANDO, FL US abstract page 30, right-hand column, paragraph 2 - paragraph 3	1-13
P, X	HERMAN WOLOSKE ET AL.: "Serine racemase: a glial enzyme synthesizing D-Serine to regulate glutamate-N-methyl-D-aspartate neurotransmission" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, vol. 96, no. 23, 9 November 1999 (1999-11-09), pages 13409-13414, XP002135967 WASHINGTON US page 13410, left-hand column, paragraph 5 -page 13413, right-hand column, paragraph 2; figure 1	1-38
P, X	HERMAN WOLOSKE ET AL.: "Purification of Serine racemase: Bioynthesis of the neuromodulator D-Serine" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, vol. 96, no. 2, 19 January 1999 (1999-01-19), pages 721-725, XP002135968 WASHINGTON US page 722, right-hand column, paragraph 3 -page 725, left-hand column, last paragraph	1-13, 32-38